

WHAT IS CLAIMED IS:

1 *Sub* A method of providing quality of service in an Internet Protocol (IP) telephony session
2 between a calling party and a called party, which comprises the steps of:

3 transporting IP media for said session between said calling party and a first device having IP
4 capability and ATM capability;

5 transporting IP media for said session between said called party and a second device having IP
6 capability and ATM capability; and

7 establishing an ATM virtual circuit for said session between said first device and said second
8 device.

1 2. The method as claimed in claim 1, wherein said first and second devices are routers.

1 3. The method as claimed in claim 1, wherein:
2 said first device is identified by a temporary session IP proxy address for said called party; and
3 said second device is identified by a temporary session IP proxy address for said calling party.
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1 4. The method as claimed in claim 1, wherein said step of establishing an ATM virtual circuit
2 between said first and second devices comprises the steps of:
3 assigning a calling party number for said session at said first device; and
4 assigning a called party number for said session at said second device.
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1 *Sub* A method of providing quality of service in an IP telephony session between a calling party and
2 a called party, which comprises the steps of:

3 assigning a temporary IP proxy address for said called party for said session at a first access
4 control manager;

5 assigning a temporary IP proxy address for said calling party for said session at a second access
6 control manager; and

7 establishing a switched virtual circuit for said session between said first access control manager
8 and said second access control manager.

1 6. The method as claimed in claim 5, wherein said step of establishing said virtual circuit
2 comprises the steps of:
3 assigning a temporary calling party address for said session at said first access control manager;
4 and
5 assigning a temporary called party address for said session at said first access control manager.

1 7. The method as claimed in claim 6, wherein said step of assigning a temporary calling party
2 address comprises the step of selecting a calling party address from a pool of calling party addresses
3 allocated to said first access manager.

1 8. The method as claimed in claim 6, wherein said step of assigning a temporary called party
2 address comprises the step of selecting a called party address from a pool of called party addresses
3 allocated to said second access manager.

1 9. The method as claimed in claim 5, further comprising the steps of:
2 routing IP media traffic from said calling party to said called party IP proxy address at said first
3 access control manager; and
4 routing IP media traffic from said called party to said calling party IP proxy address at said
5 second access control manager.

1 10. The method as claimed in claim 9, further comprising the steps of:
2 translating IP media traffic received at said called party IP proxy address to ATM traffic for
3 transport through said virtual circuit from said first access control manager to said second access
4 control manager; and
5 translating IP media traffic received at said calling party IP proxy address to ATM traffic for
6 transport through said virtual circuit from said second access control manager to said first access
7 control manager.

11. The method as claimed in claim 10, further comprising the steps of:
translating ATM traffic received at said temporary called party address to IP media traffic for transport to said called party; and
translating ATM traffic received at said temporary calling party address to IP media traffic for transport to said calling party.

Sub A method of providing quality of service in an IP telephony session between a calling party and a called party, which comprises the steps of:

assigning a temporary IP proxy address for said called party for said session at a first access control manager;

assigning a temporary IP proxy address for said calling party for said session a second access control manager;

assigning a temporary second network calling party address for said session at said first access control manager; and

assigning a temporary second network called party address for said session at said first access control manager.

13. The method as claimed in claim 12, wherein said step of assigning a temporary second network calling party address comprises the step of selecting a calling party address from a pool of second network calling party addresses allocated to said first access manager.

14. The method as claimed in claim 12, wherein said step of assigning a temporary second network called party address comprises the step of selecting a called party address from a pool of second network called party addresses allocated to said second access manager.

15. The method as claimed in claim 12, further comprising the steps of:
routing IP media traffic from said calling party to said called party IP proxy address at said first access control manager; and
routing IP media traffic from said called party to said calling party IP proxy address at said second access control manager.

1 16. The method as claimed in claim 15, wherein:
2 said second network includes an ATM network;
3 said temporary second network calling party address includes a temporary calling party
4 number; and
5 said temporary second network called party address includes a temporary called party number.

1 17. The method as claimed in claim 16, further comprising the step of establishing a switched
2 virtual connection through said ATM network between said temporary called party number and said
3 temporary calling party number.

1 18. The method as claimed in claim 17, further comprising the steps of:
2 translating IP media traffic received at said called party IP proxy address to ATM traffic for
3 transport through said virtual circuit from said first access control manager to said second access
4 control manager; and
5 translating IP media traffic received at said calling party IP proxy address to ATM traffic for
6 transport through said virtual circuit from said second access control manager to said first access
7 control manager.

1 19. The method as claimed in claim 17, further comprising the steps of:
2 translating ATM traffic received at said temporary called party number to IP media traffic for
3 transport to said called party; and
4 translating ATM traffic received at said temporary calling party number to IP media traffic for
5 transport to said calling party.

Sub #1
1 A system for providing a quality of service IP telephony session between a calling party and a
2 called party, which comprises:

3 an IP network, said IP network providing IP access to the calling party and to the called party;

4 an ATM network;

5 a first device connected between said IP network and said ATM network, said first device
6 providing bidirectional translation between IP media traffic and ATM traffic;

7 a second device connected between said IP network and said ATM network, said second
8 device providing bidirectional translation between ATM traffic and IP media traffic; and

9 an intelligent control layer for establishing a virtual circuit through said ATM network for an IP
10 telephony session between the calling party and the called party.

1 21. The system as claimed in claim 20, wherein:

2 said first device is operably connected to an ingress switch of said ATM network; and

3 said second device is operably connected to an egress switch of said ATM network.

4 22. The system as claimed in claim 20, wherein said intelligent control layer comprises:

5 an ATM intelligent controller, said ATM intelligent controller providing session setup signaling
6 to said first and second devices; and

7 an IP intelligent controller, said IP intelligent controller providing call setup signaling to said
8 ATM intelligent controller.

9 23. The system as claimed in claim 20, wherein in said first and second devices each comprise a
10 router.

Sub #2
1 The system as claimed in claim 20, wherein said intelligent control means comprises:

2 means for assigning a temporary IP session proxy address for said called party at said first
3 device; and

4 means for assigning a temporary IP session proxy address for said calling party at said second
5 device.